

### **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method comprising:
    - receiving network data in a first format via a first card coupled to a first network;
    - converting the data to a synchronous optical network (SONET/SDH) format;
    - transmitting the SONET/SDH formatted data as one or more serial data signals to a cross-connect card via a backplane;
    - performing switching functions on the SONET/SDH formatted data using the cross-connect card; and
    - transmitting the SONET/SDH formatted data as one or more serial data signals to a second card coupled to a second network via the backplane; and
    - converting the SONET/SDH formatted data to a second format and transmitting the data in the second format to the second network using the second card.
  2. (Currently Amended) The method of claim 1 wherein performing switching functions on the SONET/SDH formatted data comprises performing time switching and space switching.

3. (Cancelled)

4. (Currently Amended) The method of claim 3 1 wherein the one or more serial data signals are transmitted via the backplane as a differential pair.

5. (Original) The method of claim 1 wherein the data in the second format comprises an aggregation of multiple data signals in the first format.

*a*  
6. (Cancelled)

*cont*  
7. (Cancelled)

8. (Currently Amended) The method of claim 1, further comprising communicating wherein the SONET/SDH formatted data is communicated according to one of STS-1, STS-3, STS-12, STS-48 and STS-192 protocols.

9. (Currently Amended) An apparatus comprising:

means for receiving network data in a first format via a first card coupled to a first network

means for converting the data to a synchronous optical network (SONET/SDH) format;

means for transmitting the SONET/SDH formatted data as one or more serial data signals to a cross-connect card via a backplane;

means for performing switching functions on the SONET/SDH formatted data at the cross-connect card;

means for transmitting the SONET/SDH formatted data; at the cross-connect card; and

means for transmitting the SONET/SDH formatted data as one or more serial data signals to a second card coupled to a second network;

means for converting the SONET/SDH formatted data to a second format; and

means for transmitting the data in the second format to the second network via the second card.

10. (Currently Amended) The apparatus of claim 9 wherein the means for performing switching functions on the SONET/SDH formatted data comprises means for performing time switching and space switching.

11. (Cancelled)

12. (Currently Amended) The apparatus of claim ~~11~~ 9 wherein the one or more serial data signals is transmitted via the backplane as a differential pair.

13. (Original) The apparatus of claim 9 wherein the data in the second format comprises an aggregation of multiple data signals in the first format.

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) The method of claim 9 wherein further comprising means for communicating the SONET/SDH formatted data ~~is communicated~~ according to one of STS-1, STS-3, STS-12, STS-48 and STS-192 protocols.

17. (New) A system comprising:

a first card coupled to a first network compatible with a first data format, the first card being configured to convert data from the first data format to a synchronous optical network (SONET/SDH) format, and vice versa;

a second card coupled to a second network compatible with a second data format, the second card being configured to convert data in the second data format to the SONET/SDH format, and vice versa;

a cross-connect card configured to perform switching functions on data in the SONET/SDH format; and

a backplane communicatively connecting the first card, second card, and cross-connect card, the backplane being configured to carry data in the SONET/SDH format as one or more serial data signals between the first card, the cross-connect card, and the second card.

A  
cont

18. (New) The system of claim 17, wherein the first and second cards each include an application specific integrated circuit (ASIC) configured to perform parallel-to-serial conversion and serial-to-parallel conversion on data in the SONET/SDH format.

19. (New) The system of claim 18, wherein the ASIC is configured to perform parallel-to-serial conversion on the data in the SONET/SDH format, thereby making the data suitable for transmission to the cross-connect card via the backplane.

20. (New) The system of claim 18, wherein the ASIC is configured to perform serial-to-parallel conversion on the data in the SONET/SDH format, the data being received from the cross-connect card via the backplane.

21. (New) The system of claim 17, wherein the cross-connect card includes an application specific integrated circuit (ASIC) configured to perform the switching functions on the data in the SONET/SDH format.

22. (New) The system of claim 17, wherein the cross-connect card includes a first and second application specific integrated circuit (ASIC), each of the first and second ASICs being configured to perform parallel-to-serial conversion and serial-to-parallel conversion on data in the SONET/SDH format.

23. (New) The system of claim 17, wherein  
the first ASIC is configured to perform serial-to-parallel conversion on the data in the SONET/SDH format, the data being received from the first card via the backplane,  
the second ASIC is configured to perform parallel-to-serial conversion on the data in the SONET/SDH format, thereby making

the data suitable for transmission to the second card via the backplane; and

*A  
CMX*  
the cross-connect card further comprises a third ASIC configured to perform the switching functions on the data converted by the first ASIC, the switched data being sent to the second ASIC for conversion.

---